



OFNY & NJ

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Title  
ELECTRICAL  
SUBSTATION EQUIPMENT  
TOWER ONE AND TWO

ELECTRICAL  
TOWER ONE  
SUBSTATION SS-41N  
FRONT VIEW & SCHEDULES

No. Date Revision Approved

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FISCHER D. LEAHY J.M.  
Designed by Drawn by Checked by

Date FEB 10, 1995 Scale NONE

Contract Number Drawing Number  
WTC-802.072A E-6

NOTES:  
1. FOR LEGEND, ABBREVIATIONS AND SUMMARY OF  
EQUIPMENT SEE DRAWING E-1

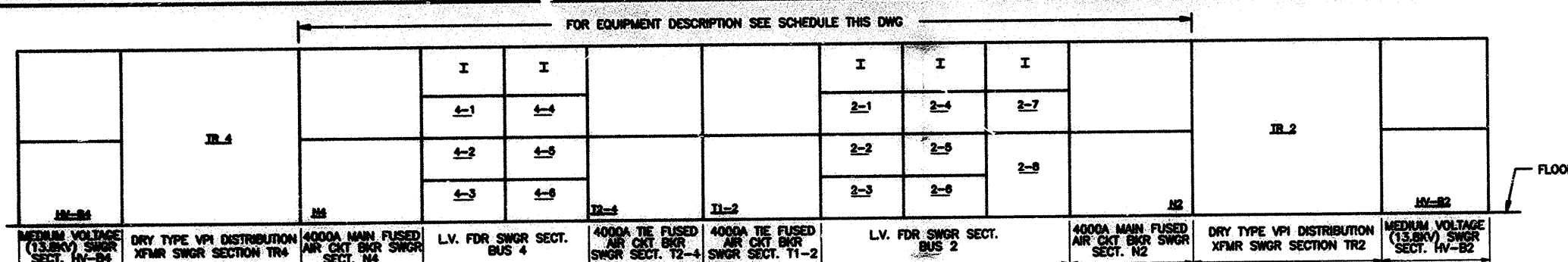
### SCHEDULE LEGEND

- ① FUSE - CURRENT LIMITING FUSES, SEE SPECIFICATION.
- ② SPACE - SPACE SHALL BE A FULLY EQUIPPED COMPARTMENT WITH BUS, PRIMARY & SECONDARY DISCONNECTS & CRADLE FOR DRAWOUT BREAKERS.
- ③ PROVIDE LUGS ON BREAKER AND GROUND BUS FOR CONDUCTORS SHOWN IN SCHEDULE ON THIS DRAWING.
- ④ PROVIDE LUGS ON GROUND BUS AS FOLLOWS:  
2000A FRAME = 3-250MCM  
1600A FRAME = 3-140  
800A FRAME = 3-110
- X INDICATES REQUIRED  
-- NOT REQUIRED

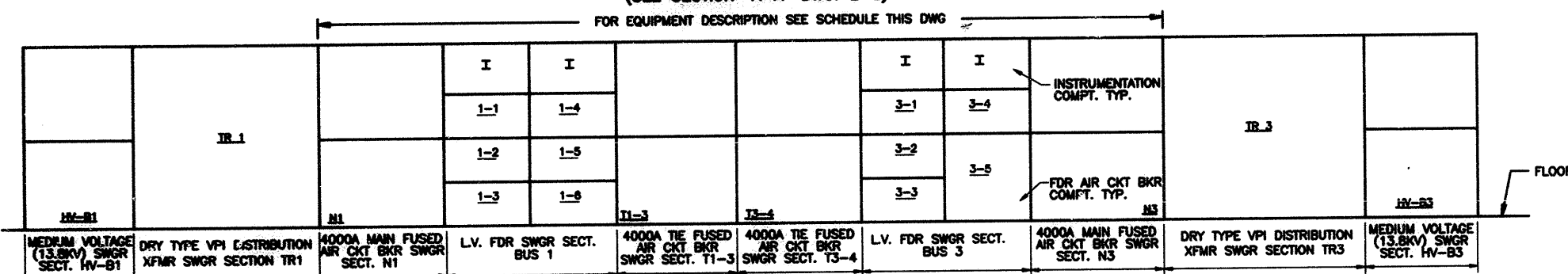
FOR EQUIPMENT DESCRIPTION SEE SCHEDULE THIS DWG

B-1
B-2
B-3
B-4
L.V. FDR SWGR SECT. BUS EL.

FRONT VIEW  
(SEE SECTION "E-E" DWG. E-3)



FRONT VIEW  
(SEE SECTION "A-A" DWG. E-3)



FRONT VIEW  
(SEE SECTION "B-B" DWG. E-3)

### LOW VOLTAGE MAIN, TIE AND FEEDER AIR CIRCUIT BREAKERS SCHEDULE

SWITCHGEAR SECTIONS	BKR COMPT. NO.	LOAD DESCRIPTION	CIRCUIT BREAKER CHARACTERISTICS AND ACCESSORIES										FEEDER		
			FRAME	TRIP	SOLID STATE TRIP UNIT						FUSE	DESIGNATION	CONDUIT QTY	SIZE	CONDUCTORS PER CONDUIT
					L.T.	S.T.	INSTA.	G.F.	U.V. TRIP	MONITORING & CONTROL FUNCTIONS, SEE SPECS					
MAIN FUSED AIR CKT BKR-SWGR SECT. N1	N1	MAIN AIR CKT. BREAKER 41 N A1 N1	4000A	4000A	X	X	X	X	X	X	5000A	---	---	---	---
LOW VOLTAGE FDR SWGR SECT. BUS 1	1-1	SPARE	1600A	1600A	X	X	X	X	X	X	2500A	---	---	---	---
LOW VOLTAGE FDR SWGR SECT. BUS 1	1-2	(R2a) 480/277V ELEC. CLOS. "N" 43rd to 50th FL	1600A	1600A	X	X	X	X	X	X	2500A	F-SN41R-2a	1	3 1/2" C	3-500MCM & 1# 1/0 GND
LOW VOLTAGE FDR SWGR SECT. BUS 1	1-3	(R7) DM-1CHI KANGYO BANK - 49th FLOOR	800A	400A	X	X	X	X	X	X	600A	F-SN41R-7	1	3 1/2" C	3-500MCM & 1# 3/0 GND
LOW VOLTAGE FDR SWGR SECT. BUS 1	1-4	(R4) ELEVATOR BUS #41N-EL VIA TRANSFER SWITCH	1600A	1200A	X	X	X	X	X	X	2000A	F-SN41R-4	4	3" C	3-350MCM & 1# 3/0 GND
LOW VOLTAGE FDR SWGR SECT. BUS 1	1-5	SPACE ②	1600A	---	---	---	---	---	---	---	---	---	---	---	---
LOW VOLTAGE FDR SWGR SECT. BUS 1	1-6	PANEL #DP-41N	800A	800A	X	X	X	X	X	X	1200A	(1-6)	2	3 1/2" C	4-500MCM & 1# 2/0 GND
TIE FUSED AIR CKT BKR-SWGR SECT. T1-3	T1-3	TIE AIR CKT. BREAKER 41 N T1-3	4000A	4000A	X	X	X	X	X	X	4000A	---	---	---	4000A BUSWAY
MAIN FUSED AIR CKT BKR-SWGR SECT. N2	N2	MAIN AIR CKT. BREAKER 41 N A2 N2	4000A	4000A	X	X	X	X	X	X	5000A	---	---	---	---
LOW VOLTAGE FDR SWGR SECT. BUS 2	2-1	(R1) 208/120V TRANSF. ELEC. CLOS. "N" 43rd to 58th FL	1600A	800A	X	X	X	X	X	X	1200A	F-SN41R-1	2	3 1/2" C	3-500MCM & 1# 2/0 GND
LOW VOLTAGE FDR SWGR SECT. BUS 2	2-2	(R2b) 480/277V ELEC. CLOS. "N" - 51st to 58th FL	1600A	1600A	X	X	X	X	X	X	2500A	F-SN41R-2b	---	---	2000A BUSWAY
LOW VOLTAGE FDR SWGR SECT. BUS 2	2-3	SPACE ②	800A	---	---	---	---	---	---	---	---	---	---	---	---
LOW VOLTAGE FDR SWGR SECT. BUS 2	2-4	(R5) MOTOR CONTROL CENTER # MN41R	1600A	1200A	X	X	X	X	X	X	2000A	F-SN41R-5	3	3 1/2" C	3-500MCM & 1# 3/0 GND
LOW VOLTAGE FDR SWGR SECT. BUS 2	2-5	SPARE	1600A	1600A	X	X	X	X	X	X	2500A	---	---	---	---
LOW VOLTAGE FDR SWGR SECT. BUS 2	2-6	(R-8T) EMERG LIGHTING PANELS NORMAL SOURCE 25th to 58th	800A	225A	X	X	X	X	X	X	350A	F-SN41R-BT	1	2 1/2" C	3 #4/0 & 1# 2 GND
LOW VOLTAGE FDR SWGR SECT. BUS 2	2-7	(R3) WATER SUPPLY PUMPS (2-75HP)	800A	400A	X	X	X	X	X	X	600A	F-SN41R-3	1	3 1/2" C	3-500MCM & 1# 1/0 GND
LOW VOLTAGE FDR SWGR SECT. BUS 2	2-8	SPARE	2000A	2000A	X	X	X	X	X	X	3000A	---	---	---	---
TIE FUSED AIR CKT BKR-SWGR SECT. T1-2	T1-2	TIE AIR CKT. BREAKER 41 N T1-2	4000A	4000A	X	X	X	X	X	X	4000A	---	---	---	4000A BUSWAY
MAIN FUSED AIR CKT BKR-SWGR SECT. N3	N3	MAIN AIR CKT. BREAKER 41 N A3 N3	4000A	4000A	X	X	X	X	X	X	5000A	---	---	---	---
LOW VOLTAGE FDR SWGR SECT. BUS 3	3-1	SPARE	1600A	1600A	X	X	X	X	X	X	2500A	---	---	---	---
LOW VOLTAGE FDR SWGR SECT. BUS 3	3-2	(L4b) 480/277V - ELEC. CLOS. "N" - 25th to 32nd FL	1600A	1600A	X	X	X	X	X	X	2500A	F-SN41L-4b	---	---	2000A BUSWAY
LOW VOLTAGE FDR SWGR SECT. BUS 3	3-3	SPARE	800A	800A	X	X	X	X	X	X	1200A	---	1	---	2#2/0 GND
LOW VOLTAGE FDR SWGR SECT. BUS 3	3-4	(L5) CHASE MANHATTAN BANK, 27th FLOOR	800A	400A	X	X	X	X	X	X	600A	F-SN41L-5	1	3 1/2" C	3-500MCM & 1# 1/0 GND
LOW VOLTAGE FDR SWGR SECT. BUS 3	3-5	(L1) ELEVATOR DISTRIBUTION PANELS EL-A41W-A & EL-A41E-A	2000A	2000A	X	X	X	X	X	X	3000A	F-SN41L-1	4	3 1/2" C	3-500MCM & 1# 250MCM GND
TIE FUSED AIR CKT BKR-SWGR SECT. T3-4	T3-4	TIE AIR CKT. BREAKER 41 N T3-4	4000A	4000A	X	X	X	X	X	X	4000A	---	---	---	4000A BUSWAY
MAIN FUSED AIR CKT BKR-SWGR SECT. N4	N4	MAIN AIR CKT. BREAKER 41 N A4 N4	4000A	4000A	X	X	X	X	X	X	5000A	---	---	---	---
LOW VOLTAGE FDR SWGR SECT. BUS 4	4-1	(L3) 208/120V TRANSF. ELEC. CLOS. "N" - 25th to 40th FL	1600A	800A	X	X	X	X	X	X	1200A	F-SN41L-3	2	3 1/2" C	3-500MCM & 1# 2/0 GND
LOW VOLTAGE FDR SWGR SECT. BUS 4	4-2	(L4c) 480/277V - ELEC. CLOS. "N" - 33rd to 40th FL	1600A	1600A	X	X	X	X	X	X	2500A	F-SN41L-4c	---	---	2000A BUSWAY
LOW VOLTAGE FDR SWGR SECT. BUS 4	4-3	SPACE ②	800A	---	---	---	---	---	---	---	---	---	---	---	---
LOW VOLTAGE FDR SWGR SECT. BUS 4	4-4	(L7) MOTOR CONTROL CENTER #MN41L	1600A	1200A	X	X	X	X	X	X	2000A	F-SN41L-7	3	3 1/2" C	3-500MCM & 1# 3/0 GND
LOW VOLTAGE FDR SWGR SECT. BUS 4	4-5	SPACE ②	1600A	---	---	---	---	---	---	---	---	---	---	---	---
LOW VOLTAGE FDR SWGR SECT. BUS 4	4-6	SPARE	800A	800A	X	X	X	X	X	X	1200A	---	1	---	2#2/0 GND
TIE FUSED AIR CKT BKR-SWGR SECT. T2-4	T2-4	TIE AIR CKT. BREAKER 41 N T2-4	4000A	4000A	X	X	X	X	X	X	4000A	---	---	---	4000A BUSWAY
LOW VOLTAGE FDR SWGR SECT. BUS EL.	---	L.V. FDR SWGR SECT. 41 N BUS EL (INCOMING FEEDER R-4)	---	---	---	---	---	---	---	---	---	F-SN41R-4	4	3" C	3-350MCM & 1 # 3/0 GND
LOW VOLTAGE FDR SWGR SECT. BUS EL.	EL-1	(R10) ELEVATOR DISTRIBUTION PANEL # EL-A-18A	800A	300A	X	X	X	X	X	X	450A	F-SN41R-10	1	2 1/2" C	3-250MCM & 1 # 2 GND
LOW VOLTAGE FDR SWGR SECT. BUS EL.	EL-2	(R11) ELEVATOR DISTRIBUTION PANEL # EL-A-28A	800A	400A	X	X	X	X	X	X	600A	F-SN41R-11	1	3 1/2" C	3-500MCM & 1 # 1/0 GND
LOW VOLTAGE FDR SWGR SECT. BUS EL.	EL-3	(R12) ELEVATOR DISTRIBUTION PANEL # EL-A-34A	800A	400A	X	X	X	X	X	X	600A	F-SN41R-12	1	3 1/2" C	3-500MCM & 1 # 1/0 GND
LOW VOLTAGE FDR SWGR SECT. BUS EL.	EL-4	(R13) ELEVATOR DISTRIBUTION PANEL # EL-A-42A	800A	600A	X	X	X	X	X	X	1000A	F-SN41R-13	2	3" C	3-350MCM & 1 # 2/0 GND